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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,251	02/26/2002	Tomihisa Ohta	112053	3481

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EXAMINER

HUANG, EVELYN MEI

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 08/07/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/082,251

Applicant(s)

OHTA ET AL.

Examiner

Evelyn Huang

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-- The MAILING DATE f this communicati n appears n the cover sheet with the correspondence address --
Peri d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-5 are pending.

Election/Restrictions

2. In response to the restriction requirement, applicant has elected with traverse the group I invention, drawn to the biphenyl compound of formula I, and the composition and method of use thereof. Claims of the other groups of inventions are withdrawn from further consideration as being drawn to the non-elected inventions. Deletion of the non-elected subject matter from the claims is recommended.

Applicant argues that the groups I, II, III, IV, VI share a common biphenyl core structure and the search is not burdensome. On the contrary, the Markush groups of compounds in the instant claims do not share a common utility and a substantial structural feature disclosed as being essential to that utility. The compounds of the various groups have utilities other than what is being disclosed. For example, the compound of Group I in soldering flux is used on printed-circuit boards for easy cleaning with freon 113 (JP 63132795).

A reference anticipates the biphenyl compounds of group I does not render obvious the binaphthyl, biquinoliny, bi-anthracenyl, bi-acridinyl or bi-benzoquinoliny compounds of groups II-VII inventions. Since these different groups of compounds are structurally so diverse that they are classified in different classes and subclasses, the search is not co-extensive and is burdensome. For example, the structure search for group I compound alone yields hundreds of answers. Since the search required for group I invention is not required for the other groups, the restriction requirement as indicated is therefore proper.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claims 1, 2, 5, 'derivative' and 'derivatives thereof' are open-ended and is therefore indefinite.
- b. Claim 2, it is unclear whether it is a composition claim or a compound claim. Amending the claim to the format of a composition claim or method claim is recommended.
- c. Claim 1, definition of R, does applicant intend 'iPt' to be 'iPr'?

Claim Rejections - 35 USC § 102

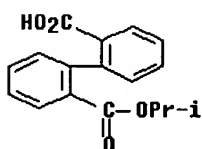
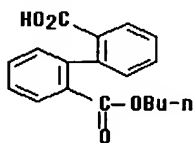
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63132795.

The compounds of the following structures are encompassed by the instant claim 1. Assuming claim 2 is a composition claim, the soldering flux containing the following compounds is encompassed by the instant composition. The use of the composition as recited in the instant fails to set a demarcation from the prior art composition.



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Allowable Subject Matter

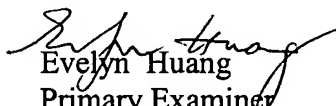
5. The method of using the compound of formula I to determine the absolute configuration of a chiral compound is allowable.

JP 63132795 discloses a biphenyl compound embraced by the instant compound of formula I. The soldering flux containing the prior art compound is used on printed-circuit boards for easy cleaning with freon 113. Motivation to modify the prior art method to arrive at the instant invention is lacking.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.


Evelyn Huang
Primary Examiner
Art Unit 1625

July 23, 2003